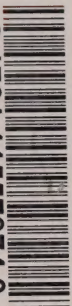


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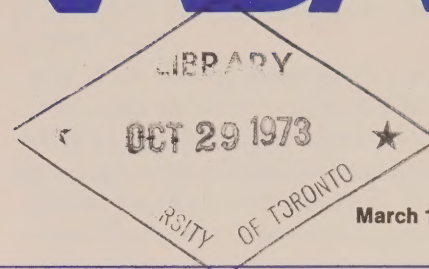


newsletter

Canada  
on resource and economic development  
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northwest territories.  
prepared by the northern economic  
development branch, department of  
Indian affairs and northern development,  
government of Canada.

# CANADA

## north of 60



March 1972

*A Report by the Honourable Jean Chrétien, Minister of Indian Affairs and Northern Development, March 28, 1972, to the Standing Committee on Indian Affairs and Northern Development on the Government's northern objectives, priorities and strategies for the 70's.*

## Northern Canada in the 70's

Popular interest and concern in the North – stimulated by dramatic discoveries, technological achievements and up-to-date information on the media – have made northern development a national endeavour and the whole area a showpiece in which a distinct image of Canada can be identified and reflected for all Canadians and other nations to see. Canadians are watching closely the evolution of national purpose and identity in the North and together with people outside have particular interest in the problems, cultural tension and change there. Others, at home and abroad will be assessing investment opportunities in a vast land that holds great promise for future resource development.

The people of the North have survived for many centuries in spite of the harsh conditions of life prevailing there. In recent decades the native northerners have been offered new opportunities and facilities for strengthening their capacity to survive. But

survival for them must be more than mere subsistence supplemented by Government subsidy. It must above all permit the people themselves to make their own choices as to the place they wish to occupy and the part they wish to play, in the evolving society of Canada, North and South of 60°.

People, resources and environment are the main elements in any strategy for northern development. In the course of its policy review during the past year, the Government affirmed that the needs of the people in the North are more important than resource development and that the maintenance of ecological balance is essential. In the setting of objectives and priorities in the North, in line with national policy goals, the essence of choice for the Government is to maintain an appropriate degree of balance among those three elements.

This statement sets out the Government's approach to policy in the Yukon and Northwest Territories directed toward certain national objectives and is intended as the policy framework for the formulation, coordination and implementation of all Federal and Territorial programs throughout the 70's.

## The Basis for Northern Development in the 70's

**1. National Objectives in the North**  
Economic and social development in the North is very sensitive to outside influence. Continuing problems in Canada such as inflation, unemployment, urban sprawl and regional disparity are bound to keep the pressures

on government at all levels for concrete action – in all parts of Canada – to stimulate the economy, reduce poverty, open opportunities for a rapidly expanding labour force and improve the infrastructure of contemporary living. Demands, innovations and discoveries affecting resources, energies and technologies in Canada and elsewhere in the world; new patterns in international economic relations; balance of payments problems; disruptions – political, economic and social – all can have profound effects on Canada's economy and prospects, and particularly on releasing the potential of the North which as a frontier area is currently marginal in the development of resources in Canada. This sensitivity of the North to external influence calls for some flexibility of approach in setting the course for northern development and adjusting it to sudden disturbances but it also calls for persistence in pursuing agreed objectives.

Longer range strategy must be seen in the light of economic development that can realistically be expected in the North:

On purely economic grounds, development of non-renewable resources will occur as a result of the pressures of demand for progressively scarcer raw materials. Government-sponsored incentives (mineral assistance grants, tax relief, development infrastructures



and services) accelerate such development rather than cause it to take place. Some settlements (mining towns for example) will have relatively short life span unless the local economy is diversified mainly by encouraging renewable resource development.

On social grounds (people wanting to stay where they are for example) the Government will continue to provide community infrastructure and services. This will bring forward problems of the future when the population will have expanded beyond the capacity of the local economy to support it, unless renewable resource development, light industry and tourism, are encouraged and assisted. In some cases such development may be uneconomic.

On policy grounds, development north of 60° will be affected by policies on resource development and environment applied in the South. While most of the social and ecological benefits of government policies are likely to accrue to northern residents, some of the ecological benefits and most of the economic benefits will be felt in the South. It seems inevitable therefore that the kind of development encouraged in the North will reflect economic conditions and policies in the South.

These points are made primarily to emphasize that, while the Government seeks to provide strategy and guidelines for one of the broad areas of Canadian life – the northern Territories – the responses are not unrelated to the broader question: What kind of Canada do we want?

The Government's national objectives in the North are:

1. To provide for a higher standard of living, quality of life and equality of opportunity for northern residents by methods which are compatible with their own preferences and aspirations.

2. To maintain and enhance the northern environment with due consideration to economic and social development.

3. To encourage viable economic development within regions of the Northern Territories so as to realize their potential contribution to the national economy and the material well-being of Canadians.

4. To realize the potential contribution of the Northern Territories to the social and cultural development of Canada.

5. To further the evolution of government in the Northern Territories.

6. To maintain Canadian sovereignty and security in the North.

7. To develop fully the leisure and recreational opportunities in Northern Territories.

The contemporary challenges in the North are seen as follows:

## **2. Northern Needs and Challenges** *To Fulfill the Needs of the Native Peoples*

The heaviest emphasis in current thinking is on the needs and aspirations of the native peoples (Eskimos, Indians and Métis). Poverty is their most pressing problem with all its psychological as well as physical characteristics. Unemployment, underemployment, low productivity are readily apparent but underlying causes run deep – erosion of traditional values, inadequacy of game resources, disease, the demoralizing effects of exposure to a highly technical culture, loss of pride and identity.

Problems arise as well for non-native residents in the two Territories very few of whom will settle there for any length of time without powerful incentives. Northern development of a kind likely to benefit all northern residents will depend heavily for quite some time on attracting Canadians from the South, whether as individuals or corporations of high calibre and capability.

The approach to social programs in the Territories today (implemented mainly by the Territorial Governments)

is based on the principle of non-discrimination (schools are integrated for example). Experience in Canada and elsewhere shows that mere formal equality can perpetuate existing economic, social and cultural inequities. This must not be allowed to happen. There is an evident need to ensure in practice that the native peoples have full opportunity to compete on a basis of true equality with other Canadians and freedom of choice to benefit materially and psychologically from the economic and social evolution in the North.

Material needs of northern residents are satisfied by essential infrastructures and services (air transportation for example is essential to overcome vast distances.) provided by all levels of government; traditional pursuits (hunting, trapping, fishing); wage employment (in government and industry). Recreational needs are met through providing parks, community facilities, cultural outlets, communications. Perceptive or psychological needs are fulfilled by conserving the quality of the natural environment (which gives the native peoples in particular satisfaction and security), by enhancing the physical environment through imaginative forms of community development, and by establishing visible means (cultural identity, social contact, economic and social advancement) whereby all northerners gain confidence in their capacity to take their place in the society of the North and Canada generally.

## *To Ensure Viable Economic Development*

The world demand for non-renewable resources is growing rapidly. While agriculture for local markets can thrive in parts of the North, some cattle ranching can develop, more of the forests will be used for pulp, lumber and plywood, fisheries will expand – a realistic assessment is that in major terms that can



affect the overall wealth of Canada, the economic future of the North lies in the ground. It is now confidently predicted that the mineral, oil and gas resources likely to be found can form the basis of very substantial economic development. The extent to which this non-renewable resource potential can be released for the benefit of northerners – and Canadians generally – will depend on systematic programming of development taking into account major economic factors affecting Canada.

New and improved technologies – in northern mining, drilling and construction; air transportation; road, railway and pipeline building; communications; marine transport in Arctic waters; hydro-power; community development – all these factors are reducing development costs in the North, bringing them steadily closer to market levels in a situation dominated by demand for secure reserves of resources and energies. Those factors are powerful incentives too to investment capital for exploration and development, mainly of non-renewable resources, which being capital rather than job-intensive does not solve employment problems. Private investment of this kind is attracted by public spending on infrastructure and services, as well as by special incentives such as mineral assistance grants.

No challenge in the North today is more pressing than the need to create employment opportunities for native northerners. The indigenous labour force is expanding quite rapidly but unless the native peoples are adequately trained and prepared for wage employment, they may not be able to take advantage of growing job opportunities. The problem is one of education and training, of influencing potential employers and prospective employees, but also of diversifying economic activities. To help solve the problems of human resource development and to round out the Territorial economies, specific programs of assistance are required for the development of renewable resource activities, in particular.

**To Maintain Ecological Balance**  
Maintenance of the ecological balance requires recognition of the total relationship of all the elements of nature. Man is included in this totality and his activities must be measured and in some instances regulated to ensure that the probability of imbalance is minimized. The natural environment in the North is very sensitive to alterations and activities related to the natural resource-base which have evolved elsewhere in Canada may not be satisfactory, particularly in the Arctic.

It is necessary to develop with respect to natural resource utilization guidelines by which such activities are controlled. A comprehensive program of regulation, based on recently enacted legislation, is required and includes elements of preservation, protection, managed-use and restoration. Moreover, the particular climatic and soil conditions of the North present strong challenges to community physical development; settlements have often had to cope with difficult problems of water supply and are still seeking adequate solutions for waste treatment.

Research on an expanding scale is a continued prerequisite if governments, industry and all others concerned in the development and protection of the northern environment are to have timely and sufficient data on which to base their plans, decisions, methods and activities. An international aspect of growing scope and importance relates to Canada's desire to cooperate, both bilaterally and multilaterally with other countries having interest and experience in northern development, with particular reference to Arctic living and of special relevance to environmental control.

## Perspectives on the North: How Do We See the North?

Broad alternative futures for the Territories depend on how we see the North in the kind of Canada we want. To begin with extremes, the northern territories could be regarded as:

A vast region of sparsely scattered population composed mainly of native peoples: who would be very largely dependent on the various social benefits subsidized from the South; whose views and needs would determine the nature and degree of social and economic development; whose education and training – except for a few individuals – would be oriented basically to the northern environment; but whose rate of natural increase would aggravate already acute problems of localized over-population, social demoralization and discontent.

A huge storehouse of natural resources and energies which would be utilized by developers, largely in response to the demands of the North American continent and through relatively shortcycle exploitation, with little regard for adverse effects on the northern residents and the natural environment.

A relatively untouched wilderness, strictly controlled for preserving the ecology and mainly intended for research by natural scientists, traditional pursuits by northern residents, and recreation by the few from North and South who could afford it.

None of these can be seen as either likely or desirable futures, nor does it now seem realistic to envisage the Territories becoming heavily populated, highly industrialized, self-sufficient provinces on the existing model in the South. For a variety of reasons large areas of the North, particularly the Arctic seem destined to remain for the foreseeable future regions of special Federal interest and responsibility.

Today some people view the North as a place where the most advanced technology is being deployed energetically, mainly by intruders from the South, in order to utilize the resource-base, mainly for the benefit of people to the South. They believe that unless effective measures are taken soon, this process of resource development seems in danger of so far outstripping programs of social improvement for the native people (Métis included) as to undermine their will and capacity to live in dignity, and their sense of belonging, with social side effects widely apparent – alcoholism, crime, family break-up. It is a vision in which the native peoples are largely spectators, the wards of paternalistic government, in a land they have inhabited for 5,000 years. It is a vision rejected by the native peoples, who are just beginning to voice their grievances and claims in an organized way, partly under the influence of similar events in southern Canada and Alaska. It is a vision which does little to enhance the "image of Canada" at home or abroad. It haunts the current approach to northern development.

A fundamental question of the future posed for policy at present is: What is to become of the native peoples of the North?

Broadly speaking, the majority of the Indian (10,050 in 1970) and Métis population live in the Yukon and the Subarctic Mackenzie River Basin. It seems likely to become a region of substantial growth with quite a diversified economy. Job opportunities (in renewable and non-renewable resource industries) can be created there for native peoples adequately trained and prepared; traditional pursuits and analogous activities (arising for example out of tourism) will be available to those less inclined to choose wage employment; many Indians will have the benefits of Treaties 8 and 11. As a group

the Indians are becoming better organized for dealing with the broader society, with which they have been in contact for quite some time, but they will need to be assisted along lines proposed in this document.

The Eskimos (11,050 in 1970) are scattered in Arctic regions where the natural constraints are very severe. New concentrations of population can result from major non-renewable resource development (Mary River in Baffin Island for example) affording opportunities for trained Eskimo labour and other economic benefits. Further improvements can be made to methods of harvesting renewable resources. The cooperative movement can be expanded for economic and cultural purposes. Associations representing the Eskimo people should be encouraged along with viable community development. The restricted opportunities for developing the economy in some regions (Keweenaw for example) and the rapid growth of the Eskimo population (rate of natural increase for Eskimos 4.0%) could stimulate migration to more favoured regions in the Territories and Southern Canada, particularly by educated and trained people. Perhaps the most important need in approaching such questions is to get rid of myths about the Eskimos ("Eskimos want to continue their traditional nomad life", "they can be insulated from the new influences at work in the North"; "they are unable to adapt to life in the South", etc.). Some Eskimos have shown keen interest in the material aspects of modern society and an eagerness to adapt themselves to it. The real need is to concentrate on means of enhancing the Eskimos' self-respect and livelihood, especially through diversified education and vocational training and fundamentally to give them mobility and freedom of choice.

It is results such as these that the policies proposed in this document are intended to promote for the native peoples. Since these groups have a rate of natural increase several times higher than that for the rest of Canada, the problems of over-population in several

regions of the Territories are likely to intensify inducing among other things a desire to migrate. An essential aim therefore is to prepare and assist the native peoples to integrate into Canadian society whether North or South of 60°, in such a way that they can maintain their pride and cultural heritage.

## The Strategy for the 70's

### 1. The Approach

Northern development is a dynamic process involving people, resources and environment. Government seeks a deliberately phased blending of social and economic programs which shifts emphasis and financial allocations to meet circumstances such as:

Imbalance perceived in the approach to development at any time;

Disturbance caused by some external influence (for example a major oil discovery elsewhere might affect the economics of northern oil);

Adjustment to a major innovation or event (pipeline or rail construction for example);

Conditions in Canada's economy (balance of payments problems for example);

Need to create employment and economic opportunities for the native peoples in particular.

The weight of policy emphasis varies with the intensity of government efforts in pursuit of the seven objectives. To illustrate, during the past two decades the emphasis has moved from defence to people programs, to resource development to ecological problems. Today there is a new requirement for shifting emphasis toward people programs but by a smooth adjustment of all programs rather than an abrupt change from one set (say resource-oriented) to another.

**2. Priorities in the North**

In this decade, given the

National objectives in the North, Natural constraints of the North, Urgency of native people problems, Adverse effects of unsystematic development of non-renewable resources and energies in Canada, Government's other priorities for Canada,

Limitation on government resources available for the North, the Government's order of priorities in the North for the next decade will be:

a) To give rapid effect to the agreed guidelines for social improvement.

b) To maintain and enhance the natural environment, through such means as intensifying ecological research, establishing national parks, ensuring wildlife conservation.

c) To encourage and stimulate the development of renewable resources, light industries and tourism, particularly those which create job and economic opportunities for native northerners.

d) To encourage and assist strategic projects (key to increased economic activity in the region or Territory with solid economic and social benefits) in the development of non-renewable resources and in which joint participation by government and private interests is generally desirable.

e) To provide necessary support for other non-renewable resource projects of recognized benefit to northern residents and Canadians generally.

**3. Requirements for Balanced Growth**

The strategy for northern development is aimed at fulfilling the following requirements:

a) In spite of heavy pressures from outside and within Canada for getting resources out rapidly, the delicately balanced ecological system must be maintained and timely data provided to the Government, by all departments and

agencies concerned, for making effective policy decisions on protecting the environment.

b) Governmental support for major development projects, whether public or private, should be based on full assessment of their economic and social impact, in the northern region concerned, in the Territories generally, and for Canada as a whole.

c) For purposes of economic planning and development, the Territories could, after thorough research and consultation with all concerned, be divided into regions essentially determined by differences in conditions prevailing and by the governmental approach needed to deal with them.

d) Because of the immaturity of the economy in most of the regions and the disruptive effects (sharp inflation, shortages of labour, accommodation and consumption goods) of major development programs, the absorptive capacity of the regional economy concerned must be carefully assessed to determine what needs to be done to prepare the region and its people for public or private projects contemplated.

e) Where a venture is strategic to development in a region, or over a wider area, the Government would participate in joint ventures, in management or in ownership to ensure that matters affecting public interest (environment, people needs) are taken fully into account (Applies primarily to non-renewable resource projects).

f) Population centres should be fostered in accordance with a rational plan for developing the Territories systematically and for providing employment and other opportunities (growth-point policy would provide some fairly strong incentives to migration from less favoured regions).

g) To deal with problems of domestic control of the economy, the Government should ensure that policies or guidelines followed in other parts of Canada are adapted to the economic situation in the North (Joint ventures may be desirable for much non-renewable resource development).

h) The economic development in the two Territories should be adjusted as between the two of them; and to related developments in the rest of Canada, particularly in the contiguous provinces and in other northern countries, with a view to achieving complementary results (air and rail links for example).

i) Though their problems of social adjustment will vary from generation to generation and from region to region, even from community to community, the native peoples should derive early and tangible benefits from economic development and be seen to benefit.

j) The guidelines for social improvement should be applied in a coherent way to get to the desired balance in northern development during the current decade.

**4. Guidelines for Social Improvement**

The priority need in the North during the coming decade is to stimulate and strengthen the people programs, so that the native peoples in particular can have some hope of adjusting to the pace of economic and social change, and preparing themselves for participating meaningfully in northern development. The importance of people participating is recognized and their right to choose between old and new ways. The need to rid northern communities of all forms of segregation is axiomatic. Many of the existing people programs are already contributing to those ends but as a whole they need to be revitalized and reinforced along the following lines, it being understood throughout that the territorial Governments and the Territorial Councils have a large share or responsibility for their implementation.

The Government has set out the following guidelines for social improvement to be acted on by all departments and agencies involved in the North:

a) Consciously create in government and industry employment opportunities for native peoples through attractive incentives, meaningful targets and where necessary imposed obligations.

b) Re-orient employment practices of government and industry in order to provide intensive training, not only in preparation for forceable employment but including on-the-job training.

c) Liberalize education and training techniques to produce more quickly qualified native practitioners in all professions and skills including teachers, nurses, mechanical engineers, communications technicians, management personnel, aircraft pilots and mechanics among others, with full provision for continuity and upgrading.

d) Train and provide experience for native northerners in executive and administrative posts, especially at municipal levels and even at the risk of higher costs and some mistakes.

e) Improve opportunities and mechanisms for consultations involving native peoples, industry and government, for social and economic development of the native bands and communities; for hearing grievances.

f) Maintain opportunities for traditional pursuits (hunting, fishing, trapping), encouraging a shift to analogous activities (campsite supervisors, tourist guides, game and fire wardens) for native peoples, and expanding well-established programs providing cultural outlets for the indigenous peoples so that they will be involved increasingly in all phases (including marketing).

g) Ensure sensitive counselling of native peoples and would-be immigrants, closest liaison with industry and effective cooperation as a group on the part of all government departments and agencies concerned with people programs.

h) Strengthen communication links (telephone, data, radio, live television for education and entertainment) among communities in the North and between the people of the North and fellow Canadians in the South.

i) Improve transportation facilities for movement of people within the regions of the North and to and from the North

j) Safeguard the culture (language, arts, handicrafts, traditional pursuits) of native peoples in the course of education, training, employment and community life; above all their right to choose what is to be preserved.

**5. Planning and Coordination**

The degree of involvement in economic and social development will increasingly require a maximum achievement in policy planning, coordination and control on the part of Federal and Territorial authorities, who must work in close partnership. Parallel cooperation is needed between the public and private sectors engaged in northern development. In sum all government activities should be directed toward meeting the challenges identified there. The means of doing so and of attaining the Government's long range objectives are to be found in the programs of some thirty Federal departments and agencies, and of the two Territorial Governments, whose activities there are reported in various Government publications.

The multiplicity of government activities north of 60 and incomplete consultation and coordination between different levels of government and among departments and agencies, are causing confusion and concern, particularly among the native peoples and on the part of industries operating in the

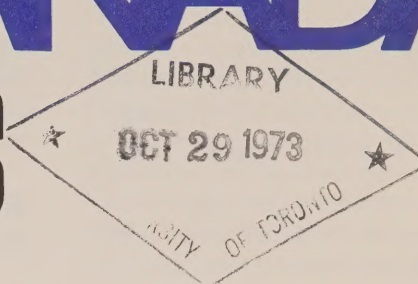
North. An evident and urgent need exists for dealing with this situation by making full use of the powers and responsibilities of the Minister of Indian Affairs and Northern Development.

In the light of the importance of coordinating activities in the North, the Minister of Indian Affairs and Northern Development, in consultation with the Advisory Committee on Northern Development will be responsible for continued and improved arrangements for joint planning and coordination of all policies and programs north of 60. Acting with and in many areas through the Territorial Governments, he has the responsibility for overseeing the implementation of this strategy and his authority is analogous to provincial jurisdiction in respect to both Territories and vis-à-vis other Federal departments and agencies concerned.

In presenting this report to the Canadian people, on its approach to northern development in the coming decade, the Government seeks to emphasize a policy that is coherent, systematic and rational, directed as it is toward clearly defined objectives and showing a very special concern for the needs of the people of the North.



CANADA

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June 1972

newsletter

on resource and economic development  
in the Yukon and the  
northwest territories.  
prepared by the northern economic  
development branch, department of  
Indian affairs and northern development,  
government of Canada.



## Transportation, Communications Corridor along Mackenzie

The Federal Government will build a transportation and communications corridor along the Mackenzie river valley, beginning with a 1,050-mile all-weather highway running from the Alberta border to Tuktoyaktuk on the Arctic Ocean.

Construction of the highway will begin this summer at Inuvik and Fort Simpson.

In announcing the highway project in Edmonton on April 28 Prime Minister Trudeau said the highway will be built ahead of any oil or gas pipelines and will therefore offer considerable cost savings to them during the construction period. For this reason, the Federal Government intends to recover some of the highway construction costs from the pipeline companies.

Elaborating on this point in an address to the 18th annual convention of the Pipeline Contractors Association of Canada in Montreal on May 11,

Northern Development Minister Jean Chrétien said that while the government had not yet worked out the method in which these costs may be recovered he doubted that a toll system would be the best method. One method he suggested was to include a reasonable figure in the charge for the right-of-way.

In further detailing the transportation corridor, Mr. Chrétien said it will contain not only the highway and one or two pipelines but also the Mackenzie River waterway system. Even with the all-weather highway the waterway system will have to be expanded to handle record barge activity associated with pipeline construction and with the oil and gas activity in the Mackenzie Delta.

The corridor will also include telephone and other communication lines. There is also the possibility of high-voltage electrical transmission lines that could distribute power to communities up and down the Mackenzie Valley, with generation from the Bear River.

### Economic Power Costs

Initial studies by the Northern Canada Power Commission indicate that a system could be developed to generate up to 600 megawatts of power at a cost of \$350 million. This is approximately half the power that two pipelines, one oil and one gas, would require for their compressors.

Mr. Chrétien said that while it is traditional for oil and gas pipelines to use the source of energy they themselves transport to operate their compressors, this system is being studied

in northern Canada as a result of experience in eastern Canada.

The Minister cautioned against making the corridor too narrow.

"If we crowd all these facilities together we may put a severe strain on the relatively fragile environment and so defeat our objective. Thus, this corridor, in all probability, will vary in width. It will be kept as narrow as possible, consistent with the engineering and environmental requirements, but in some instances it may be several miles wide, perhaps even ten, fifteen or twenty miles."

The first 270 miles of the highway has, in fact, already been built, between the Alberta border and Fort Simpson. This summer's construction budget of \$9.1 million will include an extension of the highway from Fort Simpson, and a continuation of work began last year on a stretch of road between Inuvik and Arctic Red River.

The highway will cross to the east side of the Mackenzie river near Camsell Bend and follow that side as far as Norman Wells and Sans Sault Rapids.

At Sans Sault the highway and the pipelines could cross the river or stay on the east side, depending upon a number of factors, including environmental impact, availability of granular material for construction of both the road and the pipeline, and the source of the oil or gas to be moved.



Mr. Chrétien indicated that considerable study must be undertaken before a decision is made on the location of the road between Camsell Bend and Arctic Red River.

"We must ensure that the location of the road will be such that any pipeline will be able to take maximum advantage of the corridor system during construction. In addition, we must insist that the road will be located so as to serve the needs of the people who live along the Mackenzie River as well as to minimize its overall impact on the environment."

## **Tourist Attraction**

The Minister predicted a vigorous tourist industry along the Mackenzie Highway. When the road is completed tourists will be able to make a circular tour of the Arctic. Motorists will be able to drive from Edmonton to the Arctic Ocean down the Mackenzie Valley, and return along the Dempster Highway and through the Yukon and into British Columbia by an entirely different route. These highways will make accessible over 250,000 square miles of natural wilderness, an area equivalent in size to the province of Alberta.

"Of primary importance is the fact that the Mackenzie Highway will bring an end to the isolation for much of the year of the communities along the river and will reduce the cost of goods and services in these communities. Now the 6,000 people who live there depend upon summer river transportation for the bulk of their supplies, supplemented by costly air freight year-round.

"The Mackenzie Highway will allow people to travel within the region and it will facilitate travel to areas outside of the region. It will open the way for service industries, such as hotels, motels, restaurants and service stations.

"We will have to ensure that northern residents participate in the benefits and the new economic opportunities available with the opening of the Highway. Funds will be available to them for such purposes through the Small Business Loan Fund, the Indian Economic Development Fund and other government programs, as well as from normal credit sources." (Ref: 8-1.1)

## **Record Road-building Program in Territories**

The Federal Government will spend a record \$19.2 million on road construction and reconstruction North of 60 in the current fiscal year.

The largest single project, the new Mackenzie Highway, will involve expenditures of \$9.1 million. This will include \$5.6 million for road construction from Inuvik southward, \$1.5 million for road construction northward from Fort Simpson and \$1 million for aerial surveys and location studies.

A further \$1 million has been allocated for studies to identify the location and extent of granular materials and to relate environmental studies currently being carried out to the requirements of the highway system.

The government has allocated \$5.5 million for the extension of the Dempster Highway linking the Yukon Territory with the Mackenzie Valley. Of this, \$3 million will be spent on construction between Arctic Red River and Fort McPherson in the Northwest Territories, \$2 million for new road construction on the Yukon section of the highway and some \$500,000 for surveys.

The Government plans to spend an additional \$4.6 million on reconstruction of existing roads in both territories. Included will be portions of the Mackenzie Highway south of the Yellowknife highway cutoff, the Fort Smith highway, the Whitehorse-Keno Road and the Yellowknife highway between Rae and Yellowknife. Work will also be done on the Campbell highway in the Yukon. (Ref: 8-1.1)

## **Three National Parks Created North of 60**

The Federal Government has created three new national parks North of 60. Covering more than 18,500 square miles of land, they represent the first national parks to be established in the Canadian North.

One, Kluane National Park, covers 8,500 square miles in the southwest corner of the Yukon Territory. It includes Mount Logan, the highest mountain in Canada, and one of the world's largest non-polar icefields systems.

South Nahanni National Park offers 1,840 square miles along the South Nahanni river in the Northwest Territories. One of the world's most spectacular wild rivers, the South Nahanni includes Virginia Falls, twice as high as Niagara Falls.

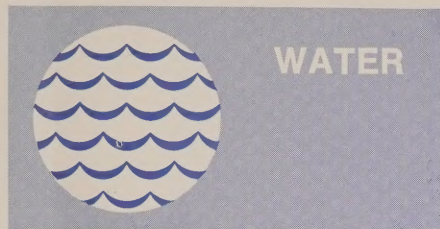
The third, Baffin Island National Park, covers 8,200 square miles and is located mainly north and west of Pangnirtung Pass in the Cumberland Peninsula of Baffin Island. The area has spectacular fjords and deeply carved mountains dominated by the massive Penny Icecap. (Ref. 7-1.1)

## **Federal Information Office in Yellowknife**

The first Federal Government information office North of 60 has been established in Yellowknife by the Department of Indian Affairs and Northern Development.

The office is under the direction of Ron Johnson, a former Toronto journalist. Mr. Johnson's primary responsibility will be to inform northern residents of the policies of the Federal Government and of departmental activities in northern Canada.





## Major Power Project Planned in Yukon

Construction of a \$12,000,000 power development on the Aishihik River in the Yukon Territory is planned by the Northern Canada Power Commission, a Federal agency.

The Commission has requested permission to undertake the project from the Yukon Territory Water Board according to procedures outlined under the newly-proclaimed Northern Inland Waters Act.

The proposed project, located 90 miles northwest of Whitehorse, would provide additional hydro capacity of up to 30 megawatts to be used to serve the Whitehorse area.

The project would include an underground power plant with a 3½ mile canal intake system and a small storage and control dam at Aishihik Lake. Power would be transmitted along a 65-mile line from the site to Braeburn, where it would join with the existing 138 kilovolt line from Whitehorse to Vangorda Creek. (Ref: 4-2.1.3)

## New Hudson Bay Port Studied by Group

Studies are now underway on the development of a new, extended-season port facility in Hudson Bay, Prime Minister Trudeau has revealed.

The Prime Minister, indicated in a speech in Edmonton on April 28 that the studies are being done by a group of

experienced businessmen and scientists calling itself the Great Plains Project, which is interested in looking at projects designed to benefit the prairie provinces. The group is monitored, but not directed, by the Prime Minister's office.

Mr. Trudeau said construction of a new Hudson Bay port facility would be of advantage to prairie grain growers.

He said the group is completing studies which are "breathtaking in their scope and their originality."

Among the studies is a giant, resource-carrying airplane, several times the size of anything now flying. Such an aircraft, if proved feasible, would revolutionize air transport and create the need in western Canada for giant maintenance and overhaul facilities, the Prime Minister stated. (Ref: 8-1.1)

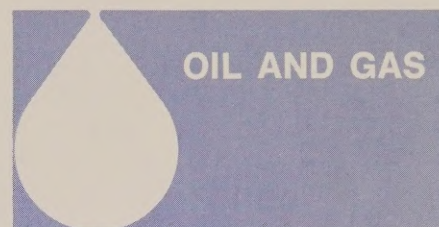
## Government Gives Aid To Great Slave Fishery

The Federal Government has come to the assistance of the Great Slave Lake fishing industry, with a contribution of \$700,000 for the completion of a fish processing plant at Hay River, N.W.T.

The plant will be completed through a contract with the Department of Indian Affairs and Northern Development and will be leased at a nominal rate to the Freshwater Fish Marketing Corporation which is responsible for the purchasing, processing and marketing of fish production from Great Slave Lake. The corporation reports to the Minister of the Environment.

The new plant, which will provide jobs for 70 persons when completed, will allow the corporation to purchase and process certain species of fish which have not been harvested to date, as well as to increase production of whitefish and lake trout.

Commercial fishing for whitefish and lake trout began on the lake in 1945. Production in 1970 totalled more than 4,000,000 pounds, and the fishery provided employment that year for 284 persons with a payroll amounting to nearly \$1.6 million. (Ref: 1-6.1)



## Pipeline to Carry N.W.T. Gas to South

The first natural gas pipeline to be built in the Northwest Territories under the current program of exploration and development of the resource has been completed.

The 32-mile line, built by Westcoast Transmission Company Limited runs from the gas field at Pointed Mountain to Beaver River, British Columbia. The 20-inch diameter line was built during the winter months between January and March by 200 men working in temperatures as low as 40 degrees below zero.

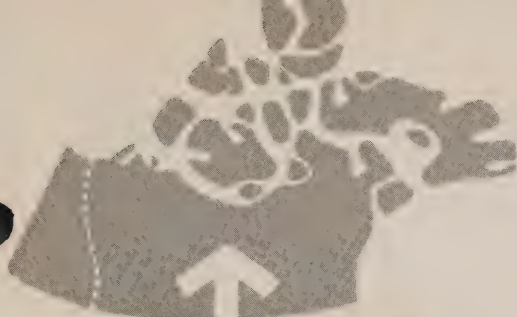
The Pointed Mountain field is being developed by Amoco Canada Petroleum Limited. The gas will flow to Beaver River where there is another gas field, and then through an existing pipeline to Fort Nelson, B.C. (Ref: 2-1.1.3)

*Issued under the authority of  
Hon. Jean Chrétien, PC, MP, Minister  
of Indian Affairs and Northern  
Development  
IAND Publication No.  
QS-1126-020-EE-A-1*







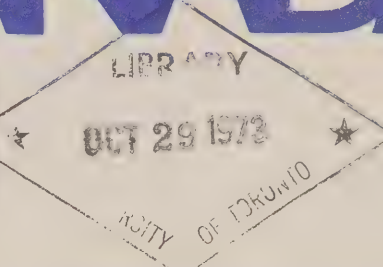


newsletter

Canada  
on resource and economic development  
in the Yukon and the  
northwest territories.  
prepared by the northern economic  
development branch, department of  
Indian affairs and northern development,  
government of Canada.

# CANADA

## north of 60



October 1972

### OIL AND GAS

## Pipeline Guidelines in Force at Year End

The Federal Government intends to bring expanded guidelines for northern pipelines into force on or about December 31, 1972. Prior to the implementation the public is invited to comment on the guidelines.

The original guidelines were announced by the Ministers of the Departments of Indian Affairs and Northern Development and Energy, Mines and Resources in August, 1970 (*Canada North of 60*, July-Sept. 1970).

Since then additional investigations and research have been carried out under the direction of the Task Force for Northern Oil Development. As a result new guidelines on the corridor concept, the environment, and social implications were proposed.

The guidelines refer only to trunk pipeline systems over land and associated bodies of fresh water on the mainland north of the 60th parallel, and do not apply to pipelines that may be proposed for the Arctic Islands and intervening marine areas.

The guidelines apply to all aspects of oil or gas pipeline pre-construction, construction, operation and abandonment, including not only the actual right-of-way, but also all associated and ancillary facilities such as roads, docks and landing areas, storage areas, air strips, pumping or compressor stations and communications and maintenance structures.

Public comments on the above guidelines are invited by the Federal Government. Specific comments and suggestions are invited from both the general public and industry on the concept and design of a transportation corridor that might include, in the long run, not only trunk pipelines and a highway, but also a railroad, electric power transmission lines and telecommunication facilities.

*Comments and suggestions should be forwarded to:*

Director,  
Environmental-Social Program,  
Northern Pipelines,  
Room 365D, Centennial Tower,  
400 Laurier Ave. West,  
Ottawa, Ontario K1A 0H4

The guidelines represent the Federal Government's current views on what should be included in the northern pipeline guidelines. A summary of views on the expanded guidelines follows:

### Corridor Guidelines

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to ensure maximum benefits to northern residents and communities, and to channel resource development in accordance with governmental priorities.

The new guidelines refer specifically to pipelines that might cross the northern portion of the Yukon Territory and through the Mackenzie Valley region of the Northwest Territories, to carry oil and gas to southern markets from sources in this part of Canada and/or from the Alaska north slope.

The Government of Canada is prepared to receive and review applications to construct one trunk oil pipeline and/or one trunk gas pipeline within the following broad "corridors":

- along the Mackenzie Valley region (in a broad sense) from the Arctic coast to the provincial boundary;
- across the northern part of the Yukon Territory either adjacent to the Arctic coast or through the northern interior region from the boundary of Alaska to the general vicinity of Fort McPherson, and thus to join the Mackenzie "corridor".

Applications may be filed with the National Energy Board for a Certificate of Public Convenience and Necessity, and with the Department of Indian Affairs and Northern Development, under the Territorial Lands Act, for tenure of land comprising the pipeline right-of-way.



In order to minimize the environmental and social disturbance arising from pipelines and their construction trunk oil and gas pipelines within the proposed corridors are to follow routes that are as close together as is consistent with the differing engineering constraints and environmental hazards of the two types of pipelines, but not so close together as to bring about undesirable environmental interaction between the two lines. The same principle is also to apply where the trunk pipeline route lies parallel and near to a present or proposed highway or other overland communication system.

In view of the influence of the first trunk pipeline in shaping the transportation corridor system and in moulding the environmental and social future of the region, an applicant to build a first trunk pipeline within any segment of the corridor system is required to provide with his application:

a) An assessment of the suitability of the applicant's route for nearby routing of the other pipelines, in terms of environmental-social and terrain-engineering consequences of the other pipeline and the combined effect of the two pipelines; (fully engineered proposals concerning the other pipeline are not necessarily required);

b) Assessment of the environmental-social impact of both pipelines on nearby settlements or nearby existing or proposed transportation systems; and

c) Comparison of the applicant's proposed route with alternative pipeline routes, in terms of environmental and social factors as well as technical and cost considerations; (fully engineered proposals concerning alternative routes are not necessarily required).

The Federal Government will identify geographic areas of specific environmental and social concern or sensitivity in the proposed broad corridors, areas in which it will impose specific

restrictions concerning route or pipeline activities, and possibly areas excluded from pipeline construction. These concerns and restrictions will pertain to fishing, hunting and trapping areas, hazardous terrain conditions, construction material sources, and other similar matters. Statements on these particular subjects will be released through the office of the Director, Environmental-Social Program Northern Pipelines.

If and when an applicant has received governmental approval to construct and operate any trunk pipeline it is contemplated that Land Management Zones under the Territorial Lands Act and/or Development Areas under the Area Development Ordinances would be established to encompass the pipeline route and the additional lands required for ancillary facilities such as roads, staging areas, gravel and borrow pits, construction camps, etc.

## Environmental Guidelines

Any applicant for a Certificate of Public Convenience and Necessity and for right-of-way and other related land requirements, must submit a comprehensive assessment, based upon documented research, of the expected effects of the project upon the environment. Any certificate issued will be strictly conditioned with respect to applicable statutes providing for the protection of the environment and the following environmental concerns of government:

1. That a pipeline be constructed, operated and abandoned in keeping with good engineering practice to ensure its safety and integrity, in the interests of good environmental management and the reduction of environmental damage;

2. That construction, operation and abandonment of a pipeline will be done so as to avoid or minimize adverse effects upon the surrounding terrain, including vegetation, and aesthetic damage to the landscape;

3. That rivers and other waterbodies will be approached and crossed, either overhead or underground, in a way that will minimize environmental dis-

turbance to the waterbody itself, to its bed and banks, and to the adjacent land or vegetation during construction, operation and abandonment of a pipeline;

4. That a pipeline will be constructed, operated and abandoned with minimal disruption to river and lake regimes, water quality, and feeding, reproduction and migrating stages of fish and other aquatic organisms;

5. That a pipeline will be constructed, operated and abandoned with minimal interference to the lands and vegetation that serve as feeding, reproduction and migrating areas for mammals and wildfowl, and with maximum protection to rare or endangered species and their habitats.

6. That adequate provision be made for disposal of sewage, garbage and various gaseous, liquid and solid wastes and all toxic materials during construction, operation and abandonment phases of the project.

7. That adequate provision be made for preservation or salvage-excavation of archaeological and historical sites, and that minimal damage to such sites will result from pipeline activities;

8. That effective plans be developed to deal with oil leaks, oil spills, pipeline rupture, fire and other hazards to terrestrial, lake and marine habitats, that such plans be designed to minimize environmental disturbances caused by containment, clean-up or other operations and to bring about adequate restoration of the environment, that they be designed to deal with minor and major incidents, whether they are single-event or occur over a period of time and that they include contingency plans to cope with major hazards or critical situations;

9. That an effective plan be developed for implementation of specific environmental safeguards through an educational program for field personnel prior to and during construction and operation of the pipeline;



10. That an effective pipeline performance monitoring system of inspection and instrumentation be established to ensure operational performance in keeping with the above-stated environmental concerns.

#### Social Guidelines

The expanded social guidelines are consistent with the Federal Government's policy on northern development. They give priority to a higher standard of living and equality of opportunity for northerners by means compatible with their own preferences and aspirations. In addition, they seek to minimize the adverse social and economic consequences associated with rapid large-scale development, where these adverse effects can be predicted with some degree of certainty. The social guidelines are as follows.

1. The Applicant must undertake specific programs leading to the employment, at all occupational levels, of residents of the territories – and in particular native people, during the construction and operation of the pipeline. Such programs or projects shall include but not be limited to: advance information on all jobs in a manner that ensures that the information reaches potential workers; skills required for various occupations and anticipated duration of employment; upgrading and skill training; other forms of integrated training that include on-the-job work experience; and counselling for those unfamiliar with industrial jobs or wage style living. All training, orientation and counselling courses will be planned and carried out in cooperation with the various agencies of government responsible for these matters. The pipeline companies shall have particular responsibility for on-the-job work experience.

2. Priority placement in jobs shall be accorded native people of the territories in keeping with the tenor of Article 5 of the International Labour Organization Convention 111, 1958, ratified by Canada, and the government's intent to increase employment opportunities for members of disad-

vantaged minority groups. During the consultation between government, unions, and employers as outlined in the Convention, ways and means will be found to ensure access for these employees into the appropriate union locals and hiring halls where there is a requirement. In addition, in accordance with the principle of employment of local workers which is accepted by organized labour, the Applicant will employ labour from the locality where work is being executed to the extent it is available. The Applicant shall comply with the above Convention and employment principles, and cooperate with government's effort to operate an effective recruitment, placement and counselling service.

3. The collective agreements signed by the Applicant and organized labour shall not distinguish between residents of the territories and allowances, including housing for operation staff, and the nature of these benefits shall be in no way inferior for employees from the territories. In addition, in situations where special measures are required to ensure the employment of native people as outlined in 111, the Applicant shall negotiate special agreements related to the employment of native people, in consultation with the native people and government. Related to the above matters but not restricted thereto is the requirement for the Applicant to set up special orientation and consultation machinery to familiarize its staff and employees with the culture and aspirations of native people and of territorial residents generally. Conversely, this orientation and consultation will acquaint employees from the territories with the pipeline industry and the work habits and life style of non-territorial employees. The orientation and consultation activity shall be planned and operated with the participation of native people, other northern residents, organized labour, the Applicant and the appropriate governmental agency that will coordinate and monitor the various functions performed.

4. Contracts and sub-contracts shall be so designed and publicized as to invite and encourage bids from native organizations, settlement councils and local contractors. In addition, the businesses and commercial organizations of the territories shall be invited and encouraged to supply goods and services required for the pipeline development and operation.

5. A substantial number of native people depend on trapping and hunting as a principal means of livelihood, and many derive a real satisfaction from being on the land and being master of a familiar environment. Therefore, the pipeline will be constructed, operated and abandoned with minimal interference with traditional trapping, hunting and fishing areas. In addition, where the pipeline construction is planned to be located in proximity to a settlement – particularly a native settlement or localized area subject to intensive use, then the location of construction camps, associated activities and the detailed siting of the pipeline will be decided by government after consultation with the Applicant and the settlement council, or local government body, or the native organization.

6. Where the construction, operation or abandonment of a pipeline results in loss or damage to the undertakings or property of territorial residents and native people in particular – then the Applicant shall deal promptly and equitably with all reasonable claims.

7. In order to ensure that the social and economic benefits outweigh the costs, the Applicant shall make a conscious effort to contribute to the social and economic development of the territories. This objective shall have particular relevance regarding: locating permanent infrastructure and maintenance facilities so that their presence will be to the benefit of communities; preserving scarce resources such as aggregate and forest products required by communities – both present and future demands; assuring residents reasonable access to transportation and communication facilities associated with the pipeline system; making gas

energy available to selected territorial communities at places and costs to be negotiated between the Applicant and the appropriate governmental agency; and the Applicant shall give prior consideration to the territorial governments – concerning the disposal of all surplus facilities, equipment, or infrastructure, at a place to be negotiated between the Applicant and the respective government.

8. The pipeline construction activity shall be self-sufficient with respect to certain services such as sewer and water, power, roads, fire prevention, recreation services and emergency health services unless there is a prior agreement to the contrary. With respect to other public services that by their nature must remain under public control such as police protection, base hospitals and like services, there will be early consultation with the appropriate level of government to ensure adequate preparation and continuing liaison during the construction and operation phases to ensure maximum coordination and cooperation.



#### Arctic Waters Shipping Regulations in Force

Regulations setting out the responsibilities and liabilities of ship and cargo owners operating in Canada's Arctic waters are now in force.

The Arctic Waters Pollution Prevention Act and accompanying regulations were proclaimed on August 2. The new regulations, which specify the financial responsibility to be carried by ship and cargo owners will, while clearly defining what constitutes abso-

lute liability, recognize certain limited defences similar to those established in international conventions and those also set out in the pollution provisions of the Canada Shipping Act.

The limits of liability conform with the international convention relating to pollution of the sea by oil. This has been done to enable Canada to take advantage of supplementary international funds which will be made available to cover the cost of pollution clean-up in excess of the insured limits, currently set at a maximum of \$30 million.

In announcing the regulations, Northern Development Minister Jean Chretien and Transport Minister Don Jamieson indicated that the regulations will apply to all pollutants rather than only to pollution by oil. Only oil pollution is covered under present international liability requirements.

The regulations are designed to apply to shipping normally passing through Arctic waters. They do not now specify limitations with respect to size of ship or the amount of potential pollution that may be carried. An intensive study of cargoes, destinations and any pollutants presently being carried is under way to determine whether such limitations should be imposed in the future.

The Ministers emphasized that promulgation of the Act and regulations should not be taken as an indication that the Government of Canada is prepared at this time to approve the passage of large oil tankers throughout Arctic waters.

In addition to the liability and financial responsibility regulations applying to ships, similar regulations will be applied with respect to land-based operations that could pollute the seas around Canada's northern coasts and from activities other than normal shipping.

Most of the regulations, since they will apply to shipping, will be prepared and administered by the Ministry of Transport. Regulations respecting land-based operations and offshore drilling in certain areas in Hudson Bay will be under the jurisdiction of the Depart-

ment of Energy, Mines and Resources. The Department of Indian Affairs and Northern Development will be responsible for administering the broad range of regulations with respect to the remaining areas in the North.

Pollution Prevention Officers for those non-shipping activities within the area of jurisdiction assigned to the Minister of Indian Affairs and Northern Development include the following.

Mr. G.B. Armstrong,  
Regional Director of Resources,  
Department of Indian Affairs and  
Northern Development,  
P.O. Box 1500,  
Yellowknife, N.W.T.

Mr. D.J. Gee,  
Regional Manager,  
Water, Forests and Land,  
Department of Indian Affairs and  
Northern Development,  
P.O. Box 1500,  
Yellowknife, N.W.T.

Mr. M.D. Thomas,  
Regional Oil and Gas Conservation  
Engineer,  
Department of Indian Affairs and  
Northern Development,  
P.O. Box 1430,  
Inuvik, N.W.T.,  
XOE OT0

Mr. B.J. Trevor,  
Regional Director of Resources,  
Department of Indian Affairs and  
Northern Development,  
Room 211,  
Federal Building,  
Whitehorse, Y.T.

Mr. L.V. Brandon,  
Regional Manager,  
Water, Forests and Land,  
Department of Indian Affairs and  
Northern Development,  
Room 221,  
Federal Building,  
Whitehorse, Y.T.





Mr. Dave M. Roebuck of the Physical Metallurgy Division of Mines Branch of the Department of Energy, Mines and Resources checks for lamination and possible internal defects in the metal and weld of a 48" pipe. This is one of the many tests conducted by the division on various types of pipes submitted for examination. (EMR Photo)

#### Task Force on Northern Oil Development

The Task Force on Northern Oil Development was established by the Federal Government in December, 1968, to advise on all aspects of northern oil development, transportation and marketing, particularly the impact of pipeline construction in the Yukon and Northwest Territories.

It comprises Messrs Jack Austin, Deputy Minister of Energy, Mines and Resources, who is the chairman; H. B. Robinson, Deputy Minister, Indian Affairs and Northern Development; Robert Shaw, Deputy Minister, Department of the Environment; O. G. Stoner, Deputy Minister, Ministry of Transport; and Dr. R. D. Howland, Chairman of the National Energy Board.

The long-term plans of the Task Force call for the organization and appraisal of studies needed to encourage optimum development of northern oil resources and also to ensure adequate government supervision and control over activities related to this resource program. With industry plans under way for oil and gas pipelines from the far north, the Task Force carries on a continuing review and appraisal of activity to ensure that industrial programs will be in the national interest.

Task Force plans are designed towards the ultimate objective of the most economic recovery of northern oil in keeping with adequate protection of the Arctic environment and maximum employment opportunities for northern citizens.

During 1970, the Task Force completed several studies which led to the establishment of the first northern pipeline guidelines. These guidelines provided terms of reference for industry in its northern oil activities and related to the common carrier concept of northern pipelines, environmental control, employment for northern residents, and full opportunity for investment by Canadians in the pipelines.

The Task Force has maintained an on-going appraisal program of exploration, transportation and market development related to northern oil activity to enable the members to advise the government on matters of regional interest. There has been a special emphasis on coordination of research concerned with environmental control, and engineering and economic studies of proposed oil and gas pipelines, from both the American and Canadian Arctic, to markets in eastern Canada and the United States.

The Task Force comprises five committees: Pipeline Engineering, Economic Impact, Transport, Marketing, and Environmental-Social. Each department and agency in the Task Force is represented on each of the committees and, in addition, representatives of other interested departments and the governments of the Yukon and Northwest Territories may be invited to participate in committee activities.



Worker pushes gravel on top of 48" pipe at the Inuvik Test Facility of the Mackenzie Valley Pipe Lines Research Limited, (Mackenzie Valley Pipe Line Research Ltd. photo)

#### Pipeline Engineering Committee

The Committee, chaired by Mr. J. Jenkins of the Department of Energy, Mines and Resources appraises all matters relative to the proposed oil and gas pipelines in the north. The emphasis is on construction procedures, design and operational criteria for these pipelines. The Committee keeps in close touch with the gas pipeline study groups who have declared themselves as possible applicants to build a gas pipeline from Prudhoe Bay across the Yukon and the Northwest Territories to continental gas markets.

Liaison is also maintained with the consortium of oil companies which is carrying out research in connection with the building of an oil pipeline in the Canadian north. Meetings have been held as well with the U.S. oil companies who are planning to build the trans-Alaska pipeline.

The Committee has close contact with such associations as the Canadian Standards Association which determines the specifications for pipeline materials.

#### Economic Impact Committee

The Committee, chaired by Mr. H. G. R. Taylor of the Department of Finance, has carried out studies to determine the expected impact on the economy of the building and operation of northern pipelines. The forecast cost for the building of a gas pipeline, for example, from Prudhoe Bay through the Yukon and Northwest Territories to the international boundary will be in excess of \$3 billion. The studies carried out by the Committee are in terms of such criteria as employment benefits, regional impacts, balance of payments and exchange rate effects, investment impacts, and availability of finances.

In general, the Committee's work is concerned with the questions as to whether a northern pipeline would be a benefit or an overall cost to the economy and the nature and scale of the benefit-cost balance.

#### Marketing Committee

The Committee, which is under the chairmanship of Mr. J. G. Stabback of the National Energy Board, has the responsibility of assessing the impact of northern oil and gas on the energy supply and demand patterns of North America. It has, for instance, determined the extent to which the Pacific Coast States of the U.S.A. could accommodate Prudhoe Bay oil and the related price effects. It has also done analyses of the laid-down cost of northern oil in such major continental markets as Chicago and Toronto.

#### Transport Committee

The Committee, under its chairman, Dr. T. G. How of the Ministry of Transport, advises the Task Force on matters relating to the transport of oil and gas, by means other than pipelines, and to the transportation services specifically required to support development of the petroleum industry in northern Canada. This Committee focused most of its attention in 1969 and 1970 on the voyages of the "Manhattan" and the possibilities of opening up a Northwest Passage. Currently, it is investigating the feasibility of harbor studies in the Arctic and it is also assessing various proposals for alternate ways of transporting oil and gas from the north.

#### Environmental-social Committee

The Committee, under its chairman, Mr. A. D. Hunt, Assistant Deputy Minister, Northern Development Program, has been more extensively developed than the others because of the major environmental program in the north in which the government of Canada is now involved. A full-time project director, Mr. Alex J. Reeve, was appointed to coordinate the committee responsibilities for the environmental and social studies in connection with various aspects of pipeline problems. The environmental program, which was approved for a three-year term late in 1970, provides for the expenditure of up to \$5 million in each of the three years.

The program is multidisciplinary involving the field and laboratory research work of sociologists, economists, geologists, geophysicists, cartographers, biologists, and specialists in forestry, water resources and wildlife.



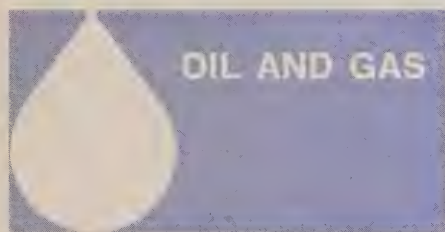
# CANADA

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newsletter

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prepared by the northern economic  
development branch, department of  
Indian affairs and northern development,  
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1. The Applicant must undertake specific programs leading to the employment, at all occupational levels, of residents of the territories – and in particular native people, during the construction and operation of the pipeline. Such programs or projects shall include but not be limited to: advance information on all jobs in a manner that ensures that the information reaches potential workers; skills required for various occupations and anticipated duration of employment; upgrading and skill training; other forms of integrated training that include on-the-job work experience, and counselling for those unfamiliar with industrial jobs or wage style living. All training, orientation and counselling courses will be planned and carried out in cooperation with the various agencies of government responsible for these matters. The pipeline companies shall have particular responsibility for on-the-job work experience.

2. Priority placement in jobs shall be accorded native people of the territories in keeping with the tenor of Article 5 of the International Labour Organization Convention 111, 1958, ratified by Canada, and the government's intent to increase employment opportunities for members of disad-

vantaged minority groups. During the consultation between government, unions, and employers as outlined in the Convention, ways and means will be found to ensure access for these employees into the appropriate union locals and hiring halls where there is a requirement. In addition, in accordance with the principle of employment of local workers which is accepted by organized labour, the Applicant will employ labour from the locality where work is being executed to the extent it is available. The Applicant shall comply with the above Convention and employment principles, and cooperate with government's effort to operate an effective recruitment, placement and counselling service.

3. The collective agreements signed by the Applicant and organized labour shall not distinguish between residents of the territories and others respecting special benefits and allowances, including housing for operation staff, and the nature of these benefits shall be in no way inferior for employees from the territories. In addition, in situations where special measures are required to ensure the employment of native people as outlined in the International Labour Convention 111, the Applicant shall negotiate special agreements related to the employment of native people, in consultation with the native people and government. Related to the above matters but not restricted thereto is the requirement for the Applicant to set up special orientation and consultation machinery to familiarize its staff and employees with the culture and aspirations of native people and of territorial residents generally. Conversely, this orientation and consultation will acquaint employees from the territories with the pipeline industry and the work habits and life style of non-territorial employees. The orientation and consultation activity shall be planned and operated with the participation of native people, other northern residents, organized labour, the Applicant and the appropriate governmental agency that will coordinate and monitor the various functions performed.

4. Contracts and sub-contracts shall be so designed and publicized as to invite and encourage bids from native organizations, settlement councils and local contractors. In addition, the businesses and commercial organizations of the territories shall be invited and encouraged to supply goods and services required for the pipeline development and operation.

5. A substantial number of native people depend on trapping and hunting as a principal means of livelihood, and many derive a real satisfaction from being on the land and being master of a familiar environment. Therefore, the pipeline will be constructed, operated and abandoned with minimal interference with traditional trapping, hunting and fishing areas. In addition, where the pipeline construction is planned to be located in proximity to a settlement – particularly a native settlement or localized area subject to intensive use, then the location of construction camps, associated activities and the detailed siting of the pipeline will be decided by government after consultation with the Applicant and the settlement council, or local government body, or the native organization.

6. Where the construction, operation or abandonment of a pipeline results in loss or damage to the undertakings or property of territorial residents and native people in particular – then the Applicant shall deal promptly and equitably with all reasonable claims.

7. In order to ensure that the social and economic benefits outweigh the costs, the Applicant shall make a conscious effort to contribute to the social and economic development of the territories. This objective shall have particular relevance regarding: locating permanent infrastructure and maintenance facilities so that their presence will be to the benefit of communities; preserving scarce resources such as aggregate and forest products required by communities – both present and future demands; assuring residents reasonable access to transportation and communication facilities associated with the pipeline system; making gas

energy available to selected territorial communities at places and costs to be negotiated between the Applicant and the appropriate governmental agency; and the Applicant shall give prior consideration to the territorial governments – concerning the disposal of all surplus facilities, equipment, or infrastructure, at a place to be negotiated between the Applicant and the respective government.

8. The pipeline construction activity shall be self-sufficient with respect to certain services such as sewer and water, power, roads, fire prevention, recreation services and emergency health services unless there is a prior agreement to the contrary. With respect to other public services that by their nature must remain under public control such as police protection, base hospitals and like services, there will be early consultation with the appropriate level of government to ensure adequate preparation and continuing liaison during the construction and operation phases to ensure maximum coordination and cooperation.



#### Arctic Waters Shipping Regulations in Force

Regulations setting out the responsibilities and liabilities of ship and cargo owners operating in Canada's Arctic waters are now in force.

The Arctic Waters Pollution Prevention Act and accompanying regulations were proclaimed on August 2. The new regulations, which specify the financial responsibility to be carried by ship and cargo owners will, while clearly defining what constitutes abso-

lute liability, recognize certain limited defences similar to those established in international conventions and those also set out in the pollution provisions of the Canada Shipping Act.

The limits of liability conform with the international convention relating to pollution of the sea by oil. This has been done to enable Canada to take advantage of supplementary international funds which will be made available to cover the cost of pollution clean-up in excess of the insured limits, currently set at a maximum of \$30 million.

In announcing the regulations, Northern Development Minister Jean Chretien and Transport Minister Don Jamieson indicated that the regulations will apply to all pollutants rather than only to pollution by oil. Only oil pollution is covered under present international liability requirements.

The regulations are designed to apply to shipping normally passing through Arctic waters. They do not now specify limitations with respect to size of ship or the amount of potential pollutant that may be carried. An intensive study of cargoes, destinations and all pollutants presently being carried is under way to determine whether such limitations should be imposed in the future.

The Ministers emphasized that promulgation of the Act and regulations should not be taken as an indication that the Government of Canada is prepared at this time to approve the passage of large oil tankers throughout Arctic waters.

In addition to the liability and financial responsibility regulations applying to ships, similar regulations will be applied with respect to land-based operations that could pollute the seas around Canada's northern coasts and from activities other than normal shipping.

Most of the regulations, since they will apply to shipping, will be prepared and administered by the Ministry of Transport. Regulations respecting land-based operations and offshore drilling in certain areas in Hudson Bay will be under the jurisdiction of the Depart-

ment of Energy, Mines and Resources. The Department of Indian Affairs and Northern Development will be responsible for administering the broad range of regulations with respect to the remaining areas in the North.

Pollution Prevention Officers for those non-shipping activities within the area of jurisdiction assigned to the Minister of Indian Affairs and Northern Development include the following:

Mr. G.B. Armstrong,  
Regional Director of Resources,  
Department of Indian Affairs and  
Northern Development,  
P.O. Box 1500,  
Yellowknife, N.W.T.

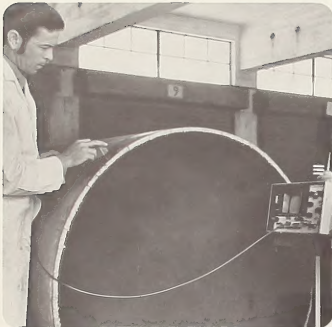
Mr. D.J. Gee,  
Regional Manager,  
Water, Forests and Land,  
Department of Indian Affairs and  
Northern Development,  
P.O. Box 1500,  
Yellowknife, N.W.T.

Mr. M.D. Thomas,  
Regional Oil and Gas Conservation  
Engineer,  
Department of Indian Affairs and  
Northern Development,  
P.O. Box 1430,  
Inuvik, N.W.T.,  
XOE 0T0

Mr. B.J. Trevor,  
Regional Director of Resources,  
Department of Indian Affairs and  
Northern Development,  
Room 211,  
Federal Building,  
Whitehorse, Y.T.

Mr. L.V. Brandon,  
Regional Manager,  
Water, Forests and Land,  
Department of Indian Affairs and  
Northern Development,  
Room 221,  
Federal Building,  
Whitehorse, Y.T.





Mr. Dave M. Roebuck of the Physical Metallurgy Division of Mines Branch of the Department of Energy, Mines and Resources checks for lamination and possible internal defects in the metal weld of a 48" pipe. This is one of the many tests conducted by the division on various types of pipes submitted for examination. (EMR Photo)

#### Task Force on Northern Oil Development

The Task Force on Northern Oil Development was established by the Federal Government in December, 1968, to advise on all aspects of northern oil development, transportation and marketing, particularly the impact of pipeline construction in the Yukon and Northwest Territories.

It comprises Messrs Jack Austin, Deputy Minister of Energy, Mines and Resources, who is the chairman; H. B. Robinson, Deputy Minister, Indian Affairs and Northern Development; Robert Shaw, Deputy Minister, Department of the Environment; O. G. Stoner, Deputy Minister, Ministry of Transport; and Dr. R. D. Howland, Chairman of the National Energy Board.

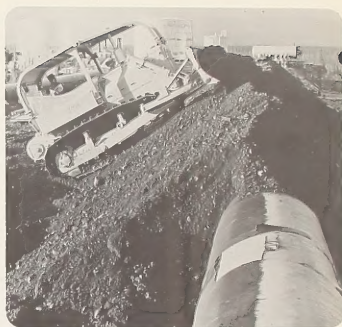
The long-term plans of the Task Force call for the organization and appraisal of studies needed to encourage optimum development of northern oil resources and also to ensure adequate government supervision and control over activities related to this resource program. With industry plans under way for oil and gas pipelines from the far north, the Task Force carries on a continuing review and appraisal of activity to ensure that industrial programs will be in the national interest.

Task Force plans are designed towards the ultimate objective of the most economic recovery of northern oil in keeping with adequate protection of the Arctic environment and maximum employment opportunities for northern citizens.

During 1970, the Task Force completed several studies which led to the establishment of the first northern pipeline guidelines. These guidelines provided terms of reference for industry in its northern oil activities and related to the common carrier concept of northern pipelines, environmental control, employment for northern residents, and full opportunity for investment by Canadians in the pipelines.

The Task Force has maintained an on-going appraisal program of exploration, transportation and market development related to northern oil activity to enable the members to advise the government on matters of national interest. There has been a special emphasis on coordination of research concerned with environmental control, and engineering and economic studies of proposed oil and gas pipelines, from both the American and Canadian Arctic, to markets in eastern Canada and the United States.

The Task Force comprises five committees: Pipeline Engineering, Economic Impact, Transport, Marketing, and Environmental-Social. Each department and agency in the Task Force is represented on each of the committees and, in addition, representatives of other interested departments and the governments of the Yukon and Northwest Territories may be invited to participate in committee activities.



A bulldozer pushes gravel on top of 48" pipe at the Inuvik Test Facility of the Mackenzie Valley Pipe Lines Research Limited. (Mackenzie Valley Pipe Line Research Ltd. photo)

#### Pipeline Engineering Committee

The Committee, chaired by Mr. J. Jenkins of the Department of Energy, Mines and Resources appraises all matters relative to the proposed oil and gas pipelines in the north. The emphasis is on construction procedures, design and operational criteria for these pipelines. The Committee keeps in close touch with the gas pipeline study groups who have declared themselves as possible applicants to build a gas pipeline from Prudhoe Bay across the Yukon and the Northwest Territories to continental gas markets.

Liaison is also maintained with the consortium of oil companies which is carrying out research in connection with the building of an oil pipeline in the Canadian north. Meetings have been held as well with the U.S. oil companies who are planning to build the trans-Alaska pipeline.

The Committee has close contact with such associations as the Canadian Standards Association which determines the specifications for pipeline materials.

#### Economic Impact Committee

The Committee, chaired by Mr. H. G. R. Taylor of the Department of Finance, has carried out studies to determine the expected impact on the economy of the building and operation of northern pipelines. The forecast cost for the building of a gas pipeline, for example, from Prudhoe Bay through the Yukon and Northwest Territories to the international boundary will be in excess of \$3 billion. The studies carried out by the Committee are in terms of such criteria as employment benefits, regional impacts, balance of payments and exchange rate effects, investment impacts, and availability of finances.

In general, the Committee's work is concerned with the questions as to whether a northern pipeline would be a benefit or an overall cost to the economy and the nature and scale of the benefit-cost balance.

#### Marketing Committee

The Committee, which is under the chairmanship of Mr. J. G. Stabback of the National Energy Board, has the responsibility of assessing the impact of northern oil and gas on the energy supply and demand patterns of North America. It has, for instance, determined the extent to which the Pacific Coast States of the U.S.A. could accommodate Prudhoe Bay oil and the related price effects. It has also done analyses of the laid-down cost of northern oil in such major continental markets as Chicago and Toronto.

#### Transport Committee

The Committee, under its chairman, Dr. T. G. How of the Ministry of Transport, advises the Task Force on matters relating to the transport of oil and gas, by means other than pipelines, and to the transportation services specifically required to support development of the petroleum industry in northern Canada. This Committee focussed most of its attention in 1969 and 1970 on the voyages of the "Manhattan" and the possibilities of opening up a Northwest Passage. Currently, it is investigating the feasibility of harbor studies in the Arctic and it is also assessing various proposals for alternate ways of transporting oil and gas from the north.

#### Environmental-social Committee

The Committee, under its Indian Affairs and Northern Development chairman, Mr. A. D. Hunt, Assistant Deputy Minister, Northern Development Program, has been more extensively developed than the others because of the major environmental program in the north in which the government of Canada is now involved. A full-time project director, Mr. Alex J. Reeve, was appointed to coordinate the committee responsibilities for the environmental and social studies in connection with various aspects of pipeline problems. The environmental program, which was approved for a three-year term late in 1970, provides for the expenditure of up to \$5 million in each of the three years.

The program is multidisciplinary involving the field and laboratory research work of sociologists, economists, geologists, geophysicists, cartographers, biologists, and specialists in forestry, water resources and wildlife.



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